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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--|-----------------|----------------------|---------------------|-----------------|
| 10/007,301 | 11/08/2001 | Rashid Ahmed Attar | PA010032B2 | 4692 |
| 23696 | 7590 10/04/2004 | | EXAMINER | |
| Qualcomm Incorporated | | | NGUYEN, HUY D | |
| Patents Department 5775 Morehouse Drive | | | ART UNIT | PAPER NUMBER |
| San Diego, CA 92121-1714 | | | 2681 | |

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | |
|--|--|--|--|--------|--|--|--|
| Office Action Summary | | 10/007,301 | ATTAR ET AL. | | | | |
| | | Examiner | Art Unit | | | | |
| | | Huy D Nguyen | 2681 | | | | |
| Period fo | The MAILING DATE of this communica | tion appears on the cover shee | t with the correspondence ad | ldress | | | |
| A SHOTHE I - Exter after - If the - If NO - Failu Any r | ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICATION of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) of period for reply is specified above, the maximum statutive to reply within the set or extended period for reply will reply received by the Office later than three months after ad patent term adjustment. See 37 CFR 1.704(b). | ATION. 37 CFR 1.136(a). In no event, however, ma cation. lays, a reply within the statutory minimum of ory period will apply and will expire SIX (6) If , by statute, cause the application to becom | y a reply be timely filed f thirty (30) days will be considered timel MONTHS from the mailing date of this c e ABANDONED (35 U.S.C. § 133). | | | | |
| Status | | | | | | | |
| 1)⊠ | Responsive to communication(s) filed | on <u>08 November 2001</u> . | | | | | |
| 2a) <u></u> ☐ | This action is FINAL . 2b | IX This action is non-final. | | | | | |
| 3) | 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | | |
| | closed in accordance with the practice | under Ex parte Quayle, 1935 | C.D. 11, 453 O.G. 213. | | | | |
| Disposition of Claims | | | | | | | |
| 4)⊠ | 4)⊠ Claim(s) <u>1-33</u> is/are pending in the application. | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| · | Claim(s) is/are allowed. | , | | | | | |
| | 6)⊠ Claim(s) <u>1-6 and 8-33</u> is/are rejected. | | | | | | |
| · - | Claim(s) <u>7</u> is/are objected to. | on and/or alaction requirement | | | | | |
| ا_ا(٥ | Claim(s) are subject to restriction | in and/or election requirement. | | | | | |
| Application Papers | | | | | | | |
| 9)[] | The specification is objected to by the E | Examiner. | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | |
| Priority (| ınder 35 U.S.C. § 119 | | | | | | |
| | Acknowledgment is made of a claim for All b) Some * c) None of: 1. Certified copies of the priority do 2. Certified copies of the priority do 3. Copies of the certified copies of application from the International | ocuments have been received. Ocuments have been received in the priority documents have be | n Application No | Stage | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
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| Attachmen | | | 0 (070.440) | | | | |
| | e of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTC) | | ew Summary (PTO-413) No(s)/Mail Date | | | | |
| 3) 🛛 Infor | mation Disclosure Statement(s) (PTO-1449 or PT er No(s)/Mail Date <u>09/21/2004</u> . | | of Informal Patent Application (PT | O-152) | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 15-25, 27-29, 31-33 are rejected under 35 U.S.C. 112, first paragraph.

Specifically, since the claimed invention is not supported by a well established utility, one skilled in the art clearly would not know how to use the claimed invention.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 15-18 recite the limitation "the apparatus as claimed in claim 13" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claims 19, 21-25, 32-33 recite the limitation "the apparatus as claimed in claim 1" in line

1. There is insufficient antecedent basis for this limitation in the claim.

Claim 20 recites the limitation "the apparatus as claimed in claim 6" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claims 27-29 recite the limitation "the method as claimed in claim 24" in line 1. There is insufficient antecedent basis for this limitation in the claim.

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Claim 31 recites the limitation "the apparatus as claimed in claim 29" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- 6. Claims 1-6, 9-10, 13, 26, 30 are rejected under 35 U.S.C. 102(a) as being anticipated by Chheda (U.S. Patent No. 6,266,529).

Regarding claims 1, 14, Rohani teaches a method for managing a list of sectors capable of communication with a subscriber station in a communication system, comprising: receiving a request to remove a sector from the subscriber station's list; determining a reverse link quality metric from the subscriber station at the sector; and retaining the sector in the subscriber station's list if said determined reverse link quality metric is sufficient (Col. 9, lines 31-67; Col. 10, lines 1-15).

Regarding claim 2, Rohani teaches the method as claimed in claim 1, wherein said retaining the sector in the subscriber station's list if said determined reverse link quality metric is sufficient comprises: declining said received request to remove a sector from the subscriber station's list (Col. 9, lines 31-67; Col. 10, lines 1-15).

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Regarding claim 3, Rohani teaches the method as claimed in claim 1, wherein said retaining the sector in the subscriber station's list if said determined reverse link quality metric is sufficient comprises: determining a forward link quality metric at which a rate of data can be decoded; and setting a forward link quality metric threshold for the sector in accordance with said determined forward link quality metric (Col. 10, lines 16-58).

Regarding claim 4, Rohani teaches the method as claimed in claim 1, wherein said determining a forward link quality metric at which a rate of data can be decoded comprises: determining a forward link quality metric at which a minimum rate of data can be decoded (Col. 10, lines 16-58).

Regarding claim 5, Rohani teaches the method as claimed in claim 1 further comprising removing a sector from the subscriber station list if said determined reverse link quality metric is insufficient (Col. 9, lines 31-67).

Regarding claims 6, 26, and 30, Rohani teaches the method as claimed in claim 1 further comprising: determining whether an imbalance exists when the sector is retained in the subscriber station's list; and transmitting from at least the sector with the highest forward link quality metric a power control command determined in accordance with the highest reverse link quality metric if the imbalance exists (Col. 10, lines 16-58).

Regarding claim 9, Rohani teaches the method as claimed in claim 1 wherein the communication system comprises the communication system in accordance with IS-95 standard (Col. 10, line 30).

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Regarding claim 10, Rohani teaches the method as claimed in claim 1 wherein the communication system comprises the communication system in accordance with wCDMA standard (Col. 10, lines 27-35).

Regarding claim 13, Rohani teaches the method as claimed in claim 1, further comprising: determining a forward link quality metric from a sector; and communicating from the subscriber station a request to remove the sector from the subscriber station list if said determined forward link quality metric is insufficient (Col. 9, lines 31-67; Col. 10, lines 1-15).

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 8, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chheda (U.S. Patent No. 6,266,529) in view of Vanghi (U.S. Patent Pub. No. US 2002/0111169).

Regarding claim 8, Chheda does not teach the method as claimed in claim 1 wherein the communication system comprises the communication system in accordance with IS-856 standard. However, the preceding limitation is taught in Vanghi (paragraphs 0022, 0024). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply the teaching of Vanghi to the teaching of Chheda to increase system capability by allowing packet data handling.

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Regarding claim 11, Chheda does not teach the method as claimed in claim 1 wherein the communication system comprises the communication system in accordance with IS-2000 standard. However, the preceding limitation is taught in Vanghi (paragraphs 0022, 0025). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply the teaching of Vanghi to the teaching of Chheda to increase system capability by allowing packet data handling.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chheda (U.S. Patent No. 6,266,529) in view of Tiedemann, Jr. et al. (U.S. Patent No. 5,987,326).

Regarding claim 12, Chheda does not teach the method as claimed in claim 1 wherein the communication system comprises the communication system in accordance with JSTD-008 standard. However, the preceding limitation is taught in Tiedemann, Jr. et al. (Col. 1, lines 13-25). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply the teaching of Vanghi to the teaching of Chheda to increase system capability by allowing packet data handling.

Allowable Subject Matter

10. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 7, the cited prior arts fail to teach the method as claimed in claim 6 wherein said determining whether an imbalance exists comprises: measuring at each sector belonging to the list reverse link quality metrics of a subscriber station; determining at each

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sector belonging to the list a quality metric of a forward link transmitted by the sector to the subscriber station; and declaring an imbalance if: the forward link quality metric of one of the plurality of sectors is greater than a forward link quality of the rest of the plurality sectors by a first threshold; and said measured reverse link quality metric at the one of the plurality is less than said measured reverse link quality at the rest of the plurality sectors by a second threshold.

Conclusion

- 11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - Rohani (U.S. Patent No. 5,999,522) teaches method and apparatus for determining hand-off candicates in a communication system.
 - Ramakrishna et al. (U.S. Patent No. 6,233,455) teaches method for utilizing negative T--COMP to improve handoff reliability.
 - Bertacchi (U.S. Patent No. 5,903,840) teaches system and method for adaptive measurement collection and handoff queuing in a radio telecommunications network.
 - Mishra et al. (U.S. Patent No. 5,590,126) teaches method for call establishment and rerouting in mobile computing networks.
 - Brody et al. (U.S. Patent No. 4,670,899) teaches load balancing for cellular radiotelephone system.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D Nguyen whose telephone number is 703-305-3283. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

(M)

Huy Nguyen

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